

AMENDMENTS TO THE SPECIFICATION

Please amend the paragraphs bridging pages 1 and 2 as follows:

For example, “Japanese Patent Application Laid-Open No. H6-22556”~~Patent document 1~~ discloses a technology of obtaining a smooth output voltage by dividing a difference ΔV , between an output-voltage command value V1 calculated in one calculation period and an output-voltage command value V2 calculated in the next one calculation period, by the number N of vertices of a triangular wave signal included in one calculation period, and by linearly complementing and changing an amplitude value of each of the output-voltage command values, by $\Delta V/N$ each, at each vertex of the triangular wave signal included in the calculation period, to thereby change the output-voltage command value from a staircase pattern to a linear pattern.

Please delete the first paragraph on page 2 as follows:

~~The above Patent document 1 is as follows.~~

Please amend the second paragraph on page 2 as follows:

~~Patent document 1:~~ Japanese Patent Application Laid-Open No. H6-22556

Please amend the third paragraph on page 2 as follows:

In the above technology ~~described in Patent document 1~~, however, a code indicating a direction of voltage change in one calculation period is fixed. Therefore, as shown in Fig. 1, if the direction of voltage change is reversed in the middle of the one calculation period, an output-voltage command value indicating such a change cannot be obtained. This case is specifically explained with reference to Fig. 1. Fig. 1 is a diagram of the comparison between a changing waveform of an output voltage command that is desired to actually output and a changing waveform of an output voltage command that is actually output.

Please amend the paragraphs bridging pages 2 and 3 as follows:

When vertices (e.g., a maximum value point on the positive side) of the sine wave are included in one calculation period as shown in Fig. 1(1), the changing waveform 1 of the output voltage command, which is actually desired to be output, becomes a staircase waveform in which an upward staircase is followed by a downward staircase portion 4 in the one calculation period. On the contrary, in the technology described in the “Japanese Patent Application Laid-Open No. H6-22556”~~Patent document 1~~, because the direction of voltage change is one direction in the one calculation period as shown in Fig. 1(2), the changing waveform 2 of the output voltage command, which is actually output, is only an upward staircase pattern. Therefore, the changing waveform 2 becomes a waveform of the upward staircase in an area 5 corresponding to the downward staircase portion 4 in the changing waveform 1 of the output voltage command, which is actually desired to be output as shown in Fig. 1(1).

Please amend the third paragraph on page 14 as follows:

The comparator 28 reflects the voltage data V11, V12, and V13 respectively in the triangular wave signal 45 which is an output of the triangular wave counter 26, in the respective time periods Δt of the reflection timing 42, 43, and 44, and outputs a PWM signal 46 to the switching circuit 43. Herein, each time period Δt of the reflection timing 42, 43, and 44 indicates a period during which a predetermined number (three in the example of Fig. 6) of vertices of the triangular wave signal 45 has passed, and the start point and the end point thereof synchronize to the vertices of the triangular wave signal 45.

Please amend the third paragraph on page 15 as follows:

On the other hand, in the embodiment, in the calculation period (time period ΔT) in which the phase change amount exceeds, for example, a predetermined value as shown in Fig. 7(2), only the phase is divided into three parts, and three output-voltage command values are obtained one by one in each time period $\Delta T/3$, such as V1 (θ_1), V2 (θ_2), and V3 (θ_3), and a

Preliminary Amendment
National Stage Entry of PCT/JP2003/12497
Q94138

PWM signal is generated for each value. Therefore, even if the output frequency becomes high and the calculation period becomes relatively long, the steps in the staircase-shaped waveform can be made smaller, which allows the waveform to approach a smoother sine wave.